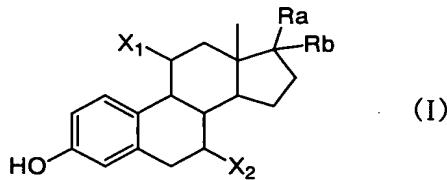
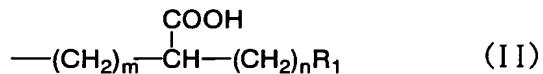


CLAIMS

1. A compound of formula (I)



(where X_1 and X_2 represent independently a hydrogen atom or
5 a group of formula (II))



R_1 represents a linear or branched halogenoalkyl group having 1-7 carbon atoms;

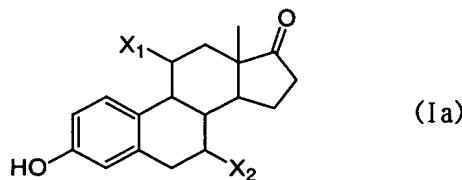
10 R_a represents a hydroxyl group and R_b represents a linear or branched alkynyl group having 2-5 carbon atoms, or R_a and R_b , when taken together with the carbon to which they are bound, represent a carbonyl group;

m is an integer of 2-14;

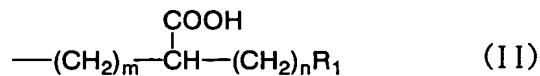
n is an integer of 2-7;

15 provided that X_1 and X_2 are not both a hydrogen atom), stereoisomers of the compound, or hydrates, salts or esters thereof.

2. A compound of formula (Ia)



(where X_1 and X_2 represent independently a hydrogen atom or a group of formula (II)



5

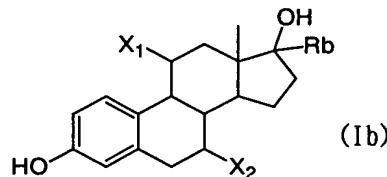
R_1 represents a linear or branched halogenoalkyl group having 1-7 carbon atoms;

m is an integer of 2-14;

n is an integer of 2-7;

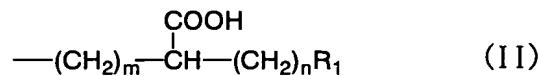
10 provided that X_1 and X_2 are not both a hydrogen atom), stereoisomers of the compound, or hydrates, salts or esters thereof.

3. A compound of formula (Ib)



15

(where X_1 and X_2 represent independently a hydrogen atom or a group of formula (II)



20

R_1 represents a linear or branched halogenoalkyl group having 1-7 carbon atoms;

Rb represents a linear or branched alkynyl group

having 2-5 carbon atoms;

m is an integer of 2-14;

n is an integer of 2-7;

provided that X_1 and X_2 are not both a hydrogen atom),

5 stereoisomers of the compound, or hydrates, salts or esters thereof.

4. The compound, stereoisomers of the compound, or hydrates, salts or esters thereof according to any one of claims 1-3, wherein m is an integer of 4-10 and n is an 10 integer of 2-6.

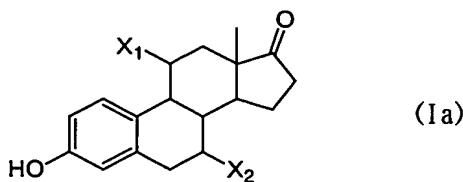
5. The compound, stereoisomers of the compound, or hydrates, salts or esters thereof according to any one of claims 1-3, wherein m is 8 and n is 3.

6. A pharmaceutical composition comprising the compound, 15 stereoisomers of the compound, or hydrates, salts or esters thereof according to any one of claims 1-3 as an active ingredient.

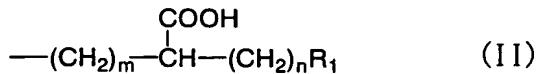
7. The pharmaceutical composition according to claim 6 which is used to prevent or treat osteoporosis.

20 8. The pharmaceutical composition according to claim 6 which is used to prevent or treat breast cancer.

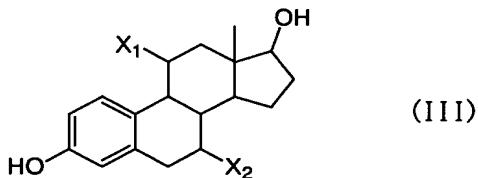
9. A process for producing a compound of formula (Ia)



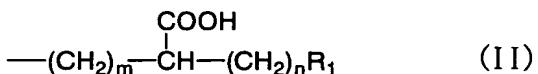
a group of formula (II)



5 R₁ represents a linear or branched halogenoalkyl
group having 1-7 carbon atoms;
 m is an integer of 2-14;
 n is an integer of 2-7;
provided that X₁ and X₂ are not both a hydrogen atom);
10 stereoisomers of the compound, or hydrates, salts or esters
thereof, said process including the step of oxidizing a
compound of formula (III)



(where X_1 and X_2 represent independently a hydrogen atom or
15 a group of formula (II))



R₁ represents a linear or branched halogenoalkyl group having 1-7 carbon atoms;

m is an integer of 2-14;

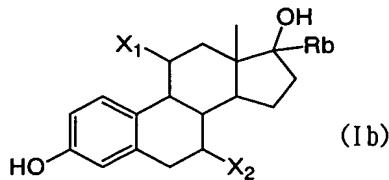
20 n is an integer of 2-7;

provided that X₁ and X₂ are not both a hydrogen atom),
stereoisomers of the compound, or hydrates, salts or esters

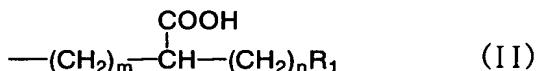
thereof.

10. The process according to claim 9, in which the oxidation reaction is performed by Oppenauer oxidation.

11. A process for producing a compound of formula (Ib)



(where X_1 and X_2 represent independently a hydrogen atom or a group of formula (II)



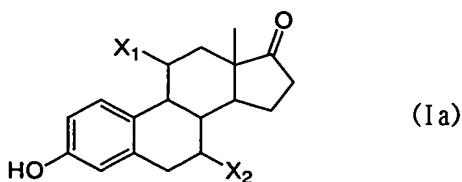
R₁ represents a linear or branched halogenoalkyl group having 1-7 carbon atoms;

10 Rb represents a linear or branched alkynyl group having 2-5 carbon atoms;

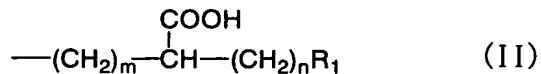
m is an integer of 2-14;

n is an integer of 2-7;

15 provided that X_1 and X_2 are not both a hydrogen atom), stereoisomers of the compound, or hydrates, salts or esters thereof, said process including the step of alkynylating a compound of formula (Ia)



(where X_1 and X_2 represent independently a hydrogen atom or a group of formula (II)



R_1 represents a linear or branched halogenoalkyl

5 group having 1-7 carbon atoms;

m is an integer of 2-14;

n is an integer of 2-7;

provided that X_1 and X_2 are not both a hydrogen atom),

stereoisomers of the compound, or hydrates, salts or esters

10 thereof.